

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1                   1.       (currently amended) A method for rendering, comprising:  
2                   establishing rendering resources at a user site;  
3                   transmitting a rendering request from the user site to a rendering service, the user  
4 site being in communication with the rendering service over a network, the rendering request  
5 comprising identifiers of rendering resources currently available at the user site required for a  
6 performing a rendering task;  
7                   maintaining at the rendering service a resource pool comprising rendering  
8 resources from at least one previous rendering request from the user site;  
9                   comparing the rendering resources in the resource pool at the rendering service  
10 with the identifiers of rendering resources currently available at the user site; and  
11                   uploading a given required resource from the user site to the rendering service  
12 only if there is not a match between the resource pool and the user site for that required resource.
- 1                   2.       (original) The method of claim 1, wherein the user site and the rendering  
2 service are located at different physical sites, and wherein the network comprises the Internet.
- 1                   3.       (original) The method of claim 1, wherein the user site and the rendering  
2 service are co-located at the same physical site, and wherein the network comprises a local area  
3 network.
- 1                   4.       (original) The method of claim 1, the rendering resources being uploaded  
2 to the rendering service in a raw format, the method further comprising:  
3                   at the rendering service, generating the raw rendering resources to produce  
4 generated rendering resources; and  
5                   providing the generated rendering resources to a rendering engine.

1                   5.       (original) The method of claim 4, the rendering resources comprising  
2 scene description files, further comprising the step of manipulating a modeling application such  
3 that said scene description files comprise at least one static scene description file and at least one  
4 dynamic scene description file, whereby a statistical upload volume of scene description data is  
5 reduced.

1                   6.       (original) The method of claim 4, further comprising:  
2 storing generated rendering resources corresponding to previous rendering  
3 requests in the resource pool; and  
4 subsequent to said comparison step, generating a given raw resource into a  
5 generated rendering resource only if that raw resource required uploading for the rendering task.

1                   7.       (original) The method of claim 4, further comprising:  
2 transmitting a session control file comprising the identities of each raw rendering  
3 resource file required for the rendering task;  
4 transmitting at least one resource generation control file comprising associations  
5 among the raw rendering resource files and a plurality of generated rendering resource files  
6 corresponding thereto; and  
7 for each raw rendering resource file, performing the steps of (i) forward-mapping  
8 that raw rendering resource file onto a set V of dependent generated rendering resource files  
9 using information derived from the resource generation control files, (ii) reverse-mapping each  
10 member of the set V onto a set W of raw rendering resource files using information derived from  
11 the resource generation control files; and (iii) marking that generated rendered resource file for  
12 generation if (a) it does not exist in the resource pool or (b) any of the set W of raw rendering  
13 resource files required uploading for the rendering task.

1                   8.       (currently amended) A network based rendering method, comprising:  
2 establishing rendering resources at a user site;

3                   transmitting a rendering request from the user site to a rendering service, the user  
4                   site being in communication with the rendering service over a network, the rendering request  
5                   comprising identifiers of rendering resources currently available at the user site required for a  
6                   performing a rendering task;  
7                   maintaining at the rendering service a resource pool comprising rendering  
8                   resources from at least one previous rendering request from the user site;  
9                   comparing the rendering resources in the resource pool at the rendering service  
10                  with the identifiers of rendering resources currently available at the user site; and  
11                  uploading a given required resource from the user site to the rendering service  
12                  only if there is not a match between the resource pool and the user site for that required resource;  
13                  wherein said rendering resources include scene description files; and wherein said  
14                  step of establishing rendering resources comprises the step of manipulating a modeling  
15                  application such that said scene description files comprise at least one static scene description  
16                  file and at least one dynamic scene description file, whereby a statistical upload volume of scene  
17                  description data is reduced in that the static scene description files will statistically be required  
18                  for a lesser number of frames of the rendering task than the dynamic scene description files.

1                   9.       (original) The method of claim 8, wherein the user site and the rendering  
2                   service are located at different physical sites, and wherein the network comprises the Internet.

1                   10.     (original) The method of claim 8, wherein the user site and the rendering  
2                   service are co-located at the same physical site, and wherein the network comprises a local area  
3                   network.

1                   11.     (original) The method of claim 8, the rendering resources further  
2                   comprising shader files, texture files, or procedural files, the rendering resources being uploaded  
3                   to the rendering service in a raw format, the method further comprising:  
4                   at the rendering service, generating the raw rendering resources to produce  
5                   generated rendering resources; and  
6                   providing the generated rendering resources to a rendering engine.

1                   12.     (original) The method of claim 11, further comprising:  
2                   storing generated rendering resources corresponding to previous sessions in the  
3 resource pool; and  
4                   subsequent to said comparison step, generating a given raw resource into a  
5 generated rendering resource only if that raw resource required uploading for the rendering task.

1                   13.     (original) The method of claim 11, further comprising:  
2                   transmitting a session control file comprising the identities of each raw rendering  
3 resource file required for the rendering task;  
4                   transmitting at least one resource generation control file comprising associations  
5 among the raw rendering resource files and a plurality of generated rendering resource files  
6 corresponding thereto; and  
7                   for each raw rendering resource file, performing the steps of (i) forward-mapping  
8 that raw rendering resource file onto a set V of dependent generated rendering resource files  
9 using information derived from the resource generation control files, (ii) reverse-mapping each  
10 member of the set V onto a set W of raw rendering resource files using information derived from  
11 the resource generation control files; and (iii) marking that generated rendered resource file for  
12 generation if (a) it does not exist in the resource pool or (b) any of the set W of raw rendering  
13 resource files required uploading for the rendering task.

1                   14.     (currently amended) A rendering method, comprising:  
2                   identifying rendering resources at a user site;  
3                   transmitting a rendering request from the user site to a rendering service, the user  
4 site being in communication with the rendering service over a network, the rendering request  
5 comprising identifiers of rendering resources currently available at the user site required for a  
6 performing a rendering task;  
7                   maintaining at the rendering service a resource pool comprising rendering  
8 resources from at least one previous rendering request from the user site;

9                   comparing the rendering resources in the resource pool at the rendering service  
10 with the identifiers of rendering resources currently available at the user site;  
11                   storing generated rendering resources corresponding to previous rendering  
12 requests in the resource pool; and  
13                   determining whether to generate a given raw resource into a generated rendering  
14 resource based on a result of the comparing step.

1                   15.   (original) A rendering method according to claim 14, further comprising  
2 uploading a given required resource from the user site to the rendering service only if the  
3 comparing step determines there is not a match between the resource pool and the user site for  
4 that required resource.

1                   16.   (original) A rendering method according to claim 15, the rendering  
2 resources being uploaded to the rendering service in a raw format, the method further  
3 comprising:  
4                   at the rendering service, generating the raw rendering resources to produce  
5 generated rendering resources; and  
6                   providing the generated rendering resources to a rendering engine.

1                   17.   (original) A method according to claim 14, the rendering resources  
2 comprising scene description files, further comprising the step of manipulating a modeling  
3 application such that said scene description files comprise at least one static scene description  
4 file and at least one dynamic scene description file.

1                   18. (currently amended) A method for rendering, comprising:  
2                   establishing rendering resources at a user site;  
3                   transmitting a rendering request from the user site to a rendering service, the user  
4 site being in communication with the rendering service over a network, the rendering request  
5 comprising identifiers of rendering resources currently available at the user site required for a  
6 performing a rendering task;

7 maintaining at the rendering service a resource pool comprising rendering  
8 resources from at least one previous rendering request from the user site;  
9 comparing the rendering resources in the resource pool at the rendering service  
10 with the identifiers of rendering resources currently available at the user site;  
11 uploading a given required resource from the user site to the rendering service  
12 only if there is not a match between the resource pool and the user site for that required resource,  
13 the rendering resources are uploaded to the rendering service in a raw format;  
14 at the rendering service, generating the raw rendering resources to produce  
15 generated rendering resources;  
16 providing the generated rendering resources to a rendering engine;  
17 storing generated rendering resources corresponding to previous rendering  
18 requests in the resource pool;  
19 subsequent to said comparison step, generating a given raw resource into a  
20 generated rendering resource only if that raw resource required uploading for the rendering task.

1 19. (currently amended) A computer program product for use in carrying out  
2 a network based rendering service, comprising:  
3 computer code for establishing rendering resources at a user site;  
4 computer code for transmitting a rendering request from the user site to a  
5 rendering service, the user site being in communication with the rendering service over a  
6 network, the rendering request comprising identifiers of rendering resources currently available  
7 at the user site required for a performing a rendering task;  
8 computer code for maintaining at the rendering service a resource pool  
9 comprising rendering resources from at least one previous rendering request from the user site;  
10 computer code for comparing the rendering resources in the resource pool at the  
11 rendering service with the identifiers of rendering resources currently available at the user site;  
12 and

13 computer code for uploading a given required resource from the user site to the  
14 rendering service only if there is not a match between the resource pool and the user site for that  
15 required resource.

1 20. (original) The computer program product of claim 19, the rendering  
2 resources being uploaded to the rendering service in a raw format, the computer program product  
3 further comprising:

4 computer code at the rendering service for generating the raw rendering resources  
5 to produce generated rendering resources; and

6 computer code for providing the generated rendering resources to a rendering  
7 engine.

1 21. (original) The computer program product of 20, the rendering resources  
2 comprising scene description files, the computer program product further comprising computer  
3 code for producing the scene description files, wherein said computer code for producing the  
4 scene description files is capable of being manipulated such that the scene description files  
5 comprise at least one static scene description file and at least one dynamic scene description file,  
6 whereby a statistical upload volume of scene description data may be reduced in that the static  
7 scene description files will statistically be required for a lesser number of frames of the rendering  
8 task than the dynamic scene description files.

1 22. (original) The computer program product of claim 20, further comprising:  
2 computer code for storing generated rendering resources corresponding to  
3 previous sessions in the resource pool; and

4 computer code for, subsequent to said comparison step, generating a given raw  
5 resource into a generated rendering resource only if that raw resource required uploading for the  
6 rendering task.

1 23. (original) The computer program product of claim 20, further comprising:

2 computer code for transmitting a session control file comprising the identities of  
3 each raw rendering resource file required for the rendering task;

4 computer code for transmitting at least one resource generation control file  
5 comprising associations among the raw rendering resource files and a plurality of generated  
6 rendering resource files corresponding thereto; and

7 computer code for performing the steps of, for each raw rendering resource file,  
8 (i) forward-mapping that raw rendering resource file onto a set V of dependent generated  
9 rendering resource files using information derived from the resource generation control files, (ii)  
10 reverse-mapping each member of the set V onto a set W of raw rendering resource files using  
11 information derived from the resource generation control files; and (iii) marking that generated  
12 rendered resource file for generation if (a) it does not exist in the resource pool or (b) any of the  
13 set W of raw rendering resource files required uploading for the rendering task.

1 24. (original) The computer program product of claim 19, wherein the user  
2 site and the rendering service are located at different physical sites, and wherein the network  
3 comprises the Internet.

1 25. (original) The computer program product of claim 19, wherein the user  
2 site and the rendering service are co-located at the same physical site, and wherein the network  
3 comprises a local area network.